

Serial No. 10/821,560Docket No. 117-P-1345USD1**Remarks**

Claim 2 has been cancelled without prejudice and claims 1, 3-19, 31, 36-39 have been amended. Antecedent basis for the amendments may be found in the specification at, e.g., page 3, lines 9-17, page 4, lines 1-2 and 16-19, page 5, lines 27-28 and page 7, lines 20-32. Following entry of this amendment, claims 1, 3-19 and 31-40 will be pending in this application.

**Rejection of Claims 1-19 under 35 U.S.C. §102(b)**

Claims 1-19 were rejected under 35 U.S.C. §102(b) as being anticipated by Published PCT Application No. WO 98/11168 (Hamrock et al.), on grounds maintained for the reasons of record as stated in the October 4, 2004 Office Action, and on the further grounds that:

*"Applicant's arguments filed on January 4, 2005 with respect to the rejection of claims 1-19 under 35 U.S.C. 102(b) as being anticipated by Hamrock et al. (WO 98/11168) and the rejection of claims 31-40 under 35 U.S.C. 103(a) as being unpatentable over Hamrock et al. (WO 98/11168) in view of Holman et al. (US 6,444,134 B1) have been fully considered but they are not persuasive. Applicants argue that the Hamrock fails to teach a waterborne topcoat. However, the Examiner would like to point out that the patentability of a product does not depend on its method of production. If the product is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698,227 USPQ 964, 966 (Fed. Cir. 1985). The structure implied by the process step has been considered when assessing the patentability of the claims over the prior art, however the use of a waterborne composition is not deemed to impart distinctive structural characteristics to the final product." (see the Office Action at pages 4-5, numbered paragraph 6).*

Applicants request reconsideration. Amended article claim 1 recites a coated floor having a strippable intermediate coating atop the floor and a topcoat atop the intermediate coating, wherein the topcoat "comprises a waterborne composition". No such coated floor is shown in

Serial No. 10/821,560Docket No. 117-P-1345USD1

Hamrock et al. Applicants are not claiming a coated floor based on "its method of production". Claim 1 addresses the coated floor after the topcoat has been applied and before it dries or hardens. Hamrock et al.'s UV curable composition is applied as a 100% solids formulation. It is not waterborne.

Regarding the Office Action's assertion that "the use of a waterborne composition is not deemed to impart distinctive structural characteristics to the final product", the Examiner is requested to review paragraphs 9-10 in the Declaration of Robert D. P. Hei Under 37 C.F.R. §1.132 (the "Hei Declaration") filed June 30, 2004 in parent Application Serial No. 09/560,170. The Hei Declaration discusses, *inter alia*, the visible appearance of vinyl composition flooring tiles coated with a single layer of PADLOCK™ acrylic polymer floor finish and overcoated with a single layer of UV-crosslinkable 100% solids finish ("Finish 2), low viscosity UV-crosslinkable 100% solids finish (Finish 3), waterborne UV-crosslinkable finish (Finish 4) or two-component aqueous polyurethane (Finish 5). Tiles coated with Finish 4 and Finish 5 exhibited better leveling and a better hardened finish appearance than tiles coated with the 100% solids topcoats, and without exhibiting diving (uneven gloss in a laminate finish that persists after the topcoat has dried or hardened). Applicants' recited coated floors have distinctive structural characteristics. Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1 and 3-19 as being anticipated by Hamrock et al.

#### **Rejection of claims 31-40 under 35 U.S.C. §103(a)**

Claims 31-40 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hamrock et al. in view of U.S. Patent No. 6,444,134 B1 (Holman et al.), on grounds maintained for the reasons of record as stated in the October 4, 2004 Office Action, and on the further grounds quoted above. Applicants request reconsideration. As noted above, applicants' recited coated floors have distinctive structural characteristics. Applicants' recited method imparts distinctive structural characteristics to those coated floors.

Serial No. 10/821,560Docket No. 117-P-1345USD1

Holman et al. say that their renewal finish has "chemical resistance" (see e.g., col. 4, lines 31-35 and 59-63). In Dr. Hei's words:

*"In my opinion a person having ordinary skill in the resilient floor finish art would not substitute a part of Holman et al.'s system (namely, the chemically resistant water-based renewal finish) for a part of Hamrock et al.'s system (namely, the 100 % solids radiation curable topcoat). Doing so would involve substituting a component of a hardwood floor refinishing system that is not said to be strippable for the upper layer of a vinyl floor coating system that should be strippable. Doing so would also be contrary to Hamrock et al.'s statements that finishes with an aqueous emulsion formulation, low solids content or an air drying requirement are "not completely satisfactory". Moreover, doing so would be contrary to the ordinary expectation of persons skilled in the resilient floor finish art that a "chemically resistant" coating should not be used where strippability is required. Thus for at least these reasons I do not believe that a person having ordinary skill in the resilient floor finish art would combine Hamrock et al. and Holman et al. as proposed in the Office Action." (see paragraph 8 in the Hei Declaration).*

Accordingly, Hamrock et al. and Holman et al. should not be combined as proposed in the Office Action.

Regarding amended method claims 36-38, Hamrock et al. does not show a coated floor like that of claim 31. Holman et al. does not show a method for stripping a floor and in fact focuses on floor refinishing without finish removal. No proper combination of Hamrock et al. and Holman would provide the method of claims 36-38.

Applicants accordingly request withdrawal of the 35 U.S.C. §103(a) rejection of claims 31-40 as being unpatentable over Hamrock et al. in view of Holman et al.

Serial No. 10/821,560Docket No. 117-P-1345USD1**Rejection of Claims 1, 5, 7, 9-11, 15 and 16 under 35 U.S.C. §102(b)**

Claims 1, 5, 7, 9-11, 15 and 16 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,932,350 (Lauer et al.), on grounds that:

*"Lauer et al. (US 5,932,350) disclose a method for tandem coating substrate, such as cellulosic substrates, with both highly crosslinked thermoset coatings and aqueous based coatings (Column 1, lines 1-9). The substrate may be coated first with the cured coating (ii) and then the highly crosslinked coating (i) which is preferably formed from a thermoset material that is UV curable and which before cure may be a high solids composition or a waterborne composition (Column 2, lines 31-51). The UV curable coatings, after exposure to UV radiation, produce highly crosslinked coatings. It has proved difficult to adhered water-based topcoats without the use of an intermediate coating (Column 3, lines 1-6). With regards to the stripability rating limitations recited in claims 7 and 16, the Examiner takes the position that such property limitations must be inherently present in the coatings taught by Lauer et al. given that the chemical composition of the coatings and the structure of the laminate as taught by Lauer et al. and as claimed in the instant application is identical. All limitations of the claimed invention are either disclosed or inherent in the above reference." (See the Office Action at pages 2-3, numbered paragraph 4).*

Applicants request reconsideration. Lauer et al.'s coating (i) is said to be "highly crosslinked" and "preferably formed from a thermoset material" (see e.g., col. 2, lines 46-47) but Lauer et al. do not say that coating (i) "can be stripped without damaging the floor". Coatings like Lauer et al.'s coating (i) normally are permanent coatings, and are not designed to be stripped and renewed. Lauer et al.'s waterbased or aqueous coating (ii) is said to be "carbonyl functional" (see e.g., col. 3, lines 9-16) and "preferably a thermoplastic or substantially uncrosslinked copolymer when it is applied (in its uncured state) to the substrate" (see e.g., col. 4, lines 38-39) but Lauer et al. do not say that the oven-dried coating (ii) "can be stripped without damaging the floor".

Serial No. 10/821,560Docket No. 117-P-1345USD1

Lauer et al. say that the cellulosic substrate material may be selected from wood, MDF, hardboard and particle board and used in interior furniture and home fittings (see e.g., col. 5, lines 52-57), and that for such cellulosic substrates the substrate is first coated with the highly crosslinked coating (i) and then coated with the waterbased coating (ii) (see e.g., col. 5, lines 52-62). This is the approach used in all of Lauer et al.'s working examples, in which two layers of highly crosslinked coating (i) are applied to a "Masonite type hardboard substrate", sanded and UV cured (see e.g., col. 5, lines 57-65 and col. 9, line 41 though col. 10, line 38), and then a layer of coating (ii) is applied atop coating (i) and oven-dried (see e.g., col. 10, lines 39-45). These working examples do not show or suggest a coated floor of claims 1, 5, 7, 9-11, 15 or 16 for at least the reason that the oven-dried aqueous thermoplastic coating (ii) would not be "less strippable and more durable than the intermediate coating".

Lauer et al. also say that in another embodiment:

*"the cellulosic material is a paper material such as may be typically used in a printing or packaging application. Here, the waterbased coating (ii) may first be applied to the substrate, such as in the form of an ink, and then the cured waterbased coating (ii) and substrate are both coated with the highly crosslinked coating"* (see e.g., col. 5, line 66 through col. 6, line 4; the "(ii)" at the end of line 4 appears to be an error and may have been intended to read "(i)").

Lauer et al. do not provide any working examples showing this latter printing or packaging embodiment. However, this printing or packaging embodiment does not show or suggest a coated floor of claims 1, 5, 7, 9-11, 15 or 16 for at least the reason that a "paper material such as may be typically used in a printing or packaging application" is not a floor.

Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1, 5, 7, 9-11, 15 and 16 as being anticipated by Lauer et al.

Serial No. 10/821,560Docket No. 117-P-1345USD1**Rejection of Claims 1-5, 7-12 and 15-19 under 35 U.S.C. §102(b)**

Claims 1-5, 7-12 and 15-19 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,494,707 (Wang et al.), on grounds that:

*“Wang et al. disclose a resilient floor covering comprising of a resilient support surface and a resilient wear surface adhered to said support surface and comprising an underlying wear layer based coat and an overlying wear layer top coat adhered to said wear layer base coat (Column 3, lines 61-68). The wear layer top coat is a hard thermoset UV curable blend of acrylates (Column 4, lines 7-10). The wear layer base coat has a thickness of 0.7 to 3.0 mils and the wear layer top coat has a thickness of 0.1 to 0.5 mils (Column 8, lines 35-45). Conventional substrate layer comprises materials typical of substrate layers found in the flooring art and include vinyl compositions (Column 9, lines 59-66). With regards to the stripability rating limitations recited in claims 7 and 16, the Examiner takes the position that such property limitations must be inherently present in the coatings taught by Wang et al, given that the chemical composition of the coatings and the structure of the laminate as taught by Wang et al. and as claimed in the instant application is identical. All limitations of the claimed invention are either disclosed or inherent in the above reference.”* (see the Office Action at pages 3-4, numbered paragraph 5).

Applicants request reconsideration. Wang et al. is similar to the previously-cited Bolgiano et al. reference in that it involves a factory-applied finish (see e.g., Examples 2 through 4) for no-wax flooring (see e.g., col. 4, lines 16-20). Wang et al.'s resilient wear surface includes a wear layer base coat and wear layer top coat. Wang et al. do not say that either the wear layer base coat or wear layer top coat “can be stripped without damaging the floor”. Wang et al. say that the wear layer base coat and wear layer top coat preferably are cross-linked sufficiently to be insoluble in certain named solvents (see e.g., col. 8, lines 62-65). Coatings like Wang et al.'s resilient wear surface normally are permanent coatings, and are not designed to be stripped and renewed.

Serial No. 10/821,560Docket No. 117-P-1345USD1

Although Wang et al. say their wear layer base coat may be "water based" or "solvent based" (see e.g., col. 8, lines 66-67), Wang et al. make no such statement concerning their wear layer top coats which appear to be 100% solids UV curable materials (see e.g., col. 9, lines 14-38, Example 5 at col. 16, lines 42-49 and Example 6 at col. 16, lines 64-67). Wang et al. do not show or suggest a coated floor of claims 1, 3-5, 7-12 or 15-19 for at least the reason that Wang et al.'s wear layer top coat is not a "waterborne composition".

Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1, 3-5, 7-12 and 15-19 as being anticipated by Wang et al.

#### Conclusion

Hamrock et al. uses a 100% solids radiation curable overcoat. Applicants have shown that a waterborne topcoat can provide a laminate finish exhibiting better leveling, a better final appearance and an absence of diving compared to a laminate finish formed from a one-part 100% solids UV curable topcoat. Applicants' recited coated floors have distinctive structural characteristics. Hamrock does not anticipate coated floor claims 1 or 3-19.

Holman et al.'s renewal finish is said to have chemical resistance. Applicants have shown that a person having ordinary skill in the resilient floor finish art would not substitute Holman et al.'s chemically resistant water-based renewal finish for Hamrock et al.'s 100 % solids radiation curable topcoat. Hamrock et al. and Holman et al. should not be combined as proposed in the Office Action, and the proposed combination of Hamrock et al. and Holman et al. would not make obvious the method of claims 31-40.

Lauer et al. refer to but do not exemplify an embodiment in which a waterbased coating (ii) is applied to "paper material such as may be typically used in a printing or packaging application", cured, and coated with a highly crosslinked coating (i). This printing or packaging embodiment does not show or suggest a coated floor of claims 1, 5, 7, 9-11, 15 or 16 for at least the reason that a "paper material such as may be typically used in a printing or packaging application" is not a floor.

Serial No. 10/821,560Docket No. 117-P-1345USD1

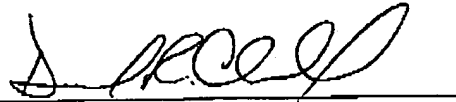
Wang et al. say their wear layer base coat may be "water based" or "solvent based" but make no such statement concerning their wear layer top coats which appear to be 100% solids UV curable materials. Wang et al. do not show or suggest a coated floor of claims 1, 3-5, 7-12 or 15-19 for at least the reason that Wang et al.'s wear layer top coat is not waterborne.

Withdrawal of the rejections and passage of the application to the issue branch are requested. The Examiner is encouraged to telephone the undersigned attorney at 612-331-7412 to discuss any unresolved questions regarding this application.

June 28, 2005

IPLM Group, P.A.  
P.O. Box 18455  
Minneapolis, MN 55418

Respectfully submitted on behalf of  
Ecolab Inc.



David R. Cleveland  
Registration No: 29,524  
612-331-7412 (telephone)  
612-331-7401 (facsimile)  
USPTO Customer No. 23322